

1. An image capture device including:
a sensor for capturing an image; and
a steganographic encoder for encoding auxiliary data in the image.

2. The image capture device of claim 1 wherein the auxiliary data describes attributes of the image.

3. The image capture device of claim 1 wherein the auxiliary data includes a reference to auxiliary data stored outside the image.

4. The image capture device of claim 1 wherein the auxiliary data includes authentication data for authenticated the image.

5. The image capture device of claim 4 wherein the authentication data is derived from the image.

6. The image capture device of claim 1 including an interface for receiving the auxiliary data from an external device.

7. The image capture device of claim 1 including an interface for receiving an operating parameter specifying a type of auxiliary data to associate with the image.

8. The image capture device of claim 1 including an interface for receiving session parameters that govern operation of the image capture device during a session.

9. The image capture device of claim 8 wherein at least one of the session parameters instructs the image capture device to preclude a user from altering a camera setting during the session.

10. The image capture device of claim 8 wherein the session parameters specify auxiliary data to be associated with a picture during a session.

5 11. An image capture device including:
a sensor for capturing an image;
a processing unit for associating auxiliary data with the image;
an interface for receiving session parameters that govern operation of the image capture device during a session.

10 12. The image capture device of claim 11 wherein the session parameters specify auxiliary data to be associated with images captured by the sensor during a session.

15 13. The image capture device of claim 11 wherein at least one of the session parameters instructs the image capture device to preclude a user from altering a camera setting during the session.

20 14. The image capture device of claim 11 wherein a session identifier is steganographically encoded in image or metadata associated with the image in the session.

25 15. A method for associating auxiliary data with an image, the method comprising:
extracting a steganographic reference to auxiliary data in the image;
querying a metadata database to request the auxiliary data associated with the image using the extracted reference to access the auxiliary data in the metadata database; and
receiving the auxiliary data from the database.

16. The method of claim 15 including:
using the auxiliary data received from the database to create an image file including the image and the auxiliary data.

17. The method of claim 15 including:
sending authentication data to the metadata database to request access to the
auxiliary data associated with the image.

5 18. The method of claim 15 including:
sending a request to the metadata database to edit the auxiliary data associated with
the image.

10 19. A computer readable medium having software for performing the method of
claim 15.

20. A method for associating auxiliary data with an image, the method comprising:
maintaining a database of auxiliary data items associated with images, each item
being associated with an image via a reference steganographically encoded in the image;
15 from a requesting application, receiving a request for auxiliary data associated with
an image, the request including a reference extracted from the image;
using the reference to locate the auxiliary data associated with the image in the
database; and
returning the auxiliary data corresponding to the reference to the requesting
20 application.

21. The method of claim 20 including:
determining whether the requesting application has access rights to the requested
auxiliary data.

25 22. The method of claim 20 including:
determining whether the requesting application has editing rights for the requested
auxiliary data.

23. A computer readable medium having software for performing the method of claim 20.

24. A method for associating auxiliary data with an image, the method comprising:
5 maintaining a database of steganographic links and metadata databases associated with the steganographic links;

from a requesting application, receiving a steganographic link extracted from an image, the link referencing auxiliary data about the image;

10 using the steganographic link to locate a metadata database that stores the auxiliary data associated with the image; and

forwarding the steganographic link to the metadata database that stores the auxiliary data associated with the image.

15 25. A computer readable medium having software for performing the method of claim 24.

26. In an image capture system that includes a camera, a camera user interface, a distinct computer, and an interface for communicating between the camera and the computer, the camera including a timekeeping function, a method comprising:

20 sending data from the computer to the camera to initiate a session, the data including date and time data;

setting the timekeeping function in the camera to correspond to the date and time data received from the computer; and

25 preventing the camera's timekeeping function from being changed, through the camera user interface, for the duration of the session.

27. The method of claim 26 in which the session continues until photo data from the camera is downloaded to the computer.

28. In a method of associating auxiliary data with an image in an imaging system, the system including a camera, a computer, and an interface for communicating between the camera and the computer, an improvement comprising automatically steganographically encoding image data with digital watermark data upon transfer to the computer.

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29. The method of claim 28 which includes associating metadata in the camera with an image captured in the camera, transferring said metadata to the computer with the image, and associating said metadata in the computer with the digital watermark.

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30. The method of claim 28 in which the digital watermark data permits detection of subsequent image alteration.

31. The method of claim 28 in which the encoding is performed by the computer.

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32. A method of operating an image capture system, the system including a camera and a distinct computer with a user interface, the method including providing to the camera from said computer at least one data item to be steganographically encoded in an image captured by the camera, wherein the user interface of the computer is utilized to specify the data item.

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33. The method of claim 32 which includes providing a steganographic link to the camera from the computer.

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34. An image database accessible on the internet, permitting storage of images from plural unrelated consumers, characterized in that the database maintains – for each of several images – a history file detailing the vendors from whom a consumer has requested service relating to an image.

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35. A method of maintaining a transaction history for image processing transactions on images, the method comprising:

maintaining a transaction history of an image stored on a networked device;
in response to receiving a transaction request to process an image stored on the
networked device, updating the transaction history of the image by adding data about the
transaction to the transaction history.

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36. The method of claim 35 including:
associating the transaction history with the image through a link between the image
and the transaction history.

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37. The method of claim 36 wherein the link is a steganographic link embedded in
the image.

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